

Attorney Docket No.: 020945-001510US

JFW 2133

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Xiaopeng Chen et al.

Application No.: 09/882,283

Filed: June 14, 2001

For: METHOD FOR ITERATIVE AND
NON-ITERATIVE DATA DETECTION
USING REDUCED-STATE SOFT-
INPUT/SOFT-OUTPUT ALGORITHMS
FOR COMPLEXITY REDUCTION

Customer No.: 20350

Confirmation No.: 7871

Examiner: Joseph D. Torres

Art Unit: 2133

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references [in compliance with the requirements of 1287 OG 163] are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or

Notice of Allowance.

08/26/2005 EHAILE1 0000007 201430 09882283

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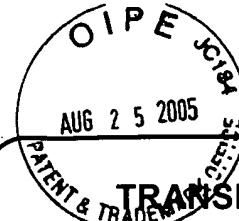
Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,


Ko-Fang Chang
Reg. No. 50,829

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Tel: 650-326-2400 Fax: 650-326-2422
KFC:djb

60570568 v1


**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

# of Pages in This Submission	7 w/7 refs	Application Number	09/882,283
		Filing Date	June 14, 2001
		First Named Inventor	Chen, Xiaopeng
		Art Unit	2133
		Examiner Name	Joseph D. Torres

Attorney Docket Number

020945-001510US

ENCLOSURES (Check all that apply)

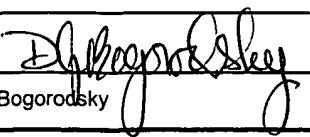
<input checked="" type="checkbox"/> PTO/SB/17 Fee Transmittal (1pg submitted in duplicate) <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Supplemental Information Disclosure Statement w/PTO/SB/08A&B (3pgs) <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): this PTO/SB/21 Transmittal Form (1pg) copies of 7 cited references Return Postcard		
<table border="1"> <tr> <td>Remarks</td> <td>The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.</td> </tr> </table>			Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.
Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.			

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	Ko-Fang Chang		
Date	August 23, 2005	Reg. No.	50,829

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature	
Typed or printed name	DJ Bogorodsky
Date	August 23, 2005

AUG 25 2005

PTO/SB/17 (12-04)

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEES TRANSMITTAL For FY 2005

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$180)

Complete if Known	
Application Number	09/882,283
Filing Date	June 14, 2001
First Named Inventor	Chen, Xiaopeng
Examiner Name	Joseph D. Torres
Art Unit	2133
Attorney Docket No.	020945-001510US

METHOD OF PAYMENT (check all that apply)

Check Credit Card Money Order None Other (please identify): _____
 Deposit Account Deposit Account Number: 20-1430 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee
 Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent

Small Entity

Fee (\$)

Fee (\$)

Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent

Fee (\$)

Fee (\$)

Multiple dependent claims

Fee (\$)

Fee (\$)

Total Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)** **Multiple Dependent Claims**
 _____ -20 or HP = _____ x _____ = _____ **Fee (\$)** **Fee Paid (\$)**

HP = highest number of total claims paid for, if greater than 20

Indep. Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)** _____ _____
 _____ -3 or HP = _____ x _____ = _____

HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets **Extra Sheets** **Number of each additional 50 or fraction thereof** **Fee (\$)** **Fee Paid (\$)**
 _____ - 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

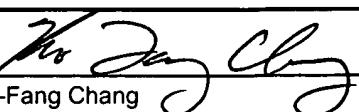
Non-English Specification, \$130 fee (no small entity discount)

Fees Paid (\$)

Other: Submission of Information Disclosure Stmt

180

SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	50,829	Telephone	650-326-2400
Name (Print/Type)	Ko-Fang Chang			Date	August 23, 2005

O I P E
AUG 25 2005
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Substitute for form 1409A&B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	1	of	1	Application Number	09/882,283
				Filing Date	June 14, 2001
				First Named Inventor	Chen, Xiaopeng
				Art Unit	2133
				Examiner Name	Joseph D. Torres
				Attorney Docket Number	020945-001510US

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	AA	R.G. GALLAGER, "Low-Density Parity-Check Codes", IRE Transactions on Information Theory, 1962		
	AB	L.R. BAHL et al., "Optimal Decoding of Linear Codes for Minimizing Symbol Error Rate", IEEE Transactions on Information Theory, March 1974		
	AC	S. Lin et al., "Error Control Coding: Fundamentals and Applications - 3 Linear Block Codes", Prentice Hall, 1983		
	AD	D.J.C. MACKAY et al., "Near Shannon limit performance of low density parity check codes", Electronic Letters, vol. 32, no. 18, August 1996		
	AE	S.M. AJI et al., "The Generalized Distributive Law", IEEE Transactions on Information Theory, vol. 46, no. 2, March 2000		
	AF	F.R. KSCHISCHANG et al., "Factor Graphs and the Sum-Product Algorithm", IEEE Transactions on Information Theory, vol. 47, no. 2, February 2001		
	AG	T.J. RICHARDSON et al., "Design of Capacity-Approaching Irregular Low-Density Parity-Check Codes", IEEE Transactions on Information Theory, vol. 47, no. 2, February 2001		
	AH			

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.